

- ☐ **OEM alarm control.** Make sure the module is able to arm and disarm the oem alarm (if applicable).
- ☐ **Door pin shutdown circuit.** Make sure the system **exits ready mode** when each door is opened while the vehicle is running under a remote start. (Test each door.)
- ☐ **Door locks and trunk testing.** Make sure each of these options respond to the transmitter (if installed).
- ☐ **Starter kill option.** Sit inside the vehicle with all doors closed. Arm the vehicle, then try to start the engine with the key. The engine should not start. If the engine starts, rewire the starter kill to reach proper operation.
- ☐ **Valet mode.** Make sure the remote car starter is able to properly enter and exit valet mode. When setting the remote car starter into valet mode, pressing the lock button will lock the doors without activating the starter kill. (Refer to the user guide for further information on valet mode.)
- ☐ **Idle mode.** Make sure the vehicle properly enters and exits idle mode.
- ☐ **Most comebacks are the result of misunderstandings about how a product works or performs.** Take the time to properly explain all functions and features to the customers before they leave the premises. Doing this will save time and money.

### Diagnostics – Parking Light Flash Table

Diagnostic table for shutdown.

Parking lights flashes	Cause
1	• Runtime has expired.
2	• Shutdown by remote. • Ready mode is activated.
3	• Failed start.
4	• Brake shutdown.
10	• Hood shutdown.
Flash for 30sec	• Panic mode

Diagnostic table for start failure.

Parking lights flashes	Cause
1 (Manual transmission only)	• Ready mode is not activated. • Tach signal is not learned.
1 slow → 2 quick	• The system is set to valet mode.
3 (Automatic transmission only)	• The parking brake is active. • Yellow loop is connected.
4	• Brake wire is active
6	• A tach signal is detected before Ignition.
10	• Hood wire is active.

**Note:** The installer can also use the PRG-1000 to diagnose shutdown and remote start failures. Refer to the PRG-1000 manual guide.

## Quick Installation Guide



To obtain a copy of the installation guide, please visit the <http://www.autostart.ca> website and click on the « Download » tab.

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### How to Enter programming mode

THE INSTALLER ...	THE MODULE ...
1) Press and hold the hood pin for 4 seconds.	Parking Lights "ON"  "ON" for 20 seconds
2) Release the hood pin (the parking lights will turn ON).	
3) While the parking lights are on, press the hood pin once more and release immediately.	
4) You now have 20 seconds to select one of the programming sub-menus.	
5) To exit programming mode, close the HOOD.	

### Resetting the Module

**WARNING!** By resetting the module, all programmed values are erased — i.e.: tach, transmitter as well as programming options. The programming options are returned to their default values.

1. **Enter programming mode (see above).**
2. Once having reached the programming mode, quickly press and release the brake pedal until the parking lights flash 8 times (you will need to press the brake pedal a minimum of 5 times).

#### Notice

The manufacturer will accept no responsibility for any electrical damage resulting from improper installation of the product, be that either damage to the vehicle itself or to the unit. This unit must be installed by a certified technician using all safety devices supplied. Please note that this guide has been written for properly trained Autostart technicians: a certain level of skills and knowledge is therefore assumed. Please review the installation guide carefully before beginning any work.

#### Warning

Before installing the unit, if installing on a vehicle with a **manual** transmission, test that the OEM Door Switch contacts of the vehicle work well, and that the Parking Brake system operates properly. If installing on a vehicle with an **automatic** transmission, test that the vehicle does not start when the gearshift lever is in the "Drive" position. If it starts in gear, reset the remote starter to manual transmission.



## Virtual Tach System

\* Virtual Tach System combines the latest microcontroller technology and a complex algorithm that took years to develop. VTS is able to effectively monitor the engine starting sequence and release the starter at the right time without physically connecting the tach wire to the remote starter. The VTS constantly monitors the data and readjusts itself automatically in order to maximize its capability to start the engine properly in any weather or deteriorating battery condition (automatic transmission only).

### Optional Time Delay Adjustment in Virtual Tach System

Follow these steps to program crank time adjustment, if needed:

1. Enter programming mode (**page-1**) — the parking lights will stay on for up to 20 seconds.
2. Before the lights go out, press and hold the brake pedal and press the **LOCK** and **UNLOCK** buttons simultaneously — the parking lights will flash 4 times. **Do not release the brake pedal.** Note: For vehicles that require the ignition to be turned ON to activate the brake, follow these steps:
  - a. Turn the ignition ON; The parking lights will turn OFF
  - b. After 4 seconds the parking lights will turn ON and then press the brake.
3. Press the **LOCK** button if you wish to increase the time delay or the **UNLOCK** button if you want to decrease it. **The time delay will be increased or decreased by 50ms. and the parking lights will flash once every time the LOCK or UNLOCK button is pressed.**
4. Press the **TRUNK** button to save the settings you have entered.
5. Release the brake pedal — the time delay programming is now complete.

## Multi-speed Tach Programming

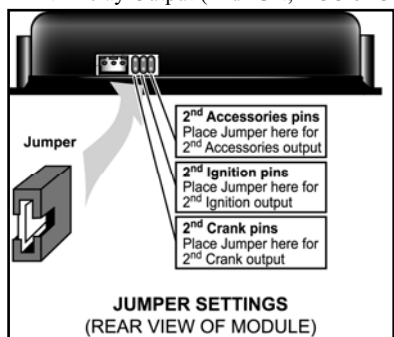
- 1) Enter programming mode (**page-1**) — the parking lights will stay on for up to 20 seconds.
- 2) Before the lights go out, press and hold the brake pedal and press the **LOCK** and **UNLOCK** buttons simultaneously — the parking lights will flash 4 times. At that point, release the brake pedal. **Note:** For vehicles that require the ignition to be turned ON to activate the brake, follow these steps:
  - a. Turn the ignition ON; The parking lights will turn OFF
  - b. After 4 seconds the parking lights will turn ON and then press the brake.
- 3) Start up the engine and allow the vehicle to reach regular engine idle speed.
- 4) Once the engine is running at normal idle speed, press the brake pedal and keep it down until you hear the parking lights output click 5 times.
- 5) Release the brake pedal — the tach programming is now complete.

## Horn Honk Timing adjustment

- 1) Enter programming mode (**page-1**)
- 2) Press and hold the brake pedal, then simultaneously press the **UNLOCK** and **START/STOP** buttons — the horn will chirp 5 times. **Note:** For vehicles that require the ignition to be turned ON to activate the brake, follow these steps:
  - a. Turn the ignition ON; The parking lights will turn OFF
  - b. After 4 seconds the parking lights will turn ON and then press the brake.
- 3) Release the brake pedal.
- 4) To change the timing:
  - To increase the Horn pulse by 3 ms, press the **LOCK** button.
  - To decrease the pulse by 3 ms, press the **UNLOCK** button.
  - To increase the pulse by 10 ms, press the **START/STOP** button.
  - To decrease the pulse by 10 ms, press the **TRUNK** button.
- 5) To save the new settings: press **LOCK** and **UNLOCK**. If 3 chirps are returned, the new settings have been saved.

## Supplementary Information

Fifth Relay Output (2nd IGN, ACC or CRANK)



Remote car starters of this series are equipped with an on-board high-current programmable 5<sup>th</sup> relay that can be used to power a second ignition, accessory or crank wire. The unit uses 3 sets of pins; each set corresponds to a specific function of the output. In order to activate one of the three possible functions, you must place the jumper (supplied) on one of the three sets of pins and connect the 14 AWG wire to the second **IGN. / ACC. / CRANK** wire of the vehicle.

OPTION 3	Passive arming (3 min.)
<b>FUNCTION 4 – Door lock pulse timing</b>	
OPTION 1*	7/10-sec. lock / unlock pulses
OPTION 2	4-sec. lock / unlock pulses
OPTION 3	7/10-sec. lock pulse and two ¼ -sec. unlock pulses
<b>FUNCTION 5 – LED flashing</b>	
OPTION 1*	ENABLED (without starter kill → will flash only when ignition is OFF)
OPTION 2	DISABLED
OPTION 3	ENABLED (with starter kill → will <b>ONLY</b> flash when the starter kill engages. This option should be selected <b>ONLY</b> if the starter kill is installed.)

<b>MODE 2</b> (* indicates default setting)	
<b>FUNCTION 1 - Engine Run Time</b>	
OPTION 1	Run Time = 3 minutes in gas mode / 8 minutes diesel mode
OPTION 2*	Run Time = 15 minutes in gas mode / 20 minutes diesel mode
OPTION 3	Run Time = 25 minutes in gas mode / 30 minutes diesel mode
<b>FUNCTION 2 - Idle Mode &amp; Turbo Mode (auto) / Turbo Mode (manual)</b>	
OPTION 1	Idle mode & turbo mode DISABLED (AUTO) / turbo mode DISABLED (MANUAL)
OPTION 2*	Idle mode & turbo mode ENABLED (AUTO) / turbo mode DISABLED (MANUAL)
OPTION 3	Idle mode & turbo mode ENABLED (AUTO) / turbo mode ENABLED (MANUAL)
<b>FUNCTION 3 – Engine type and Cold Weather Mode</b>	
OPTION 1	Diesel mode with 20-minute run time in cold weather mode (30-sec. wait to start delay)
OPTION 2*	Gas mode with 3-minute run time in cold weather mode
OPTION 3	Diesel mode with 8-minute run time in cold weather mode (18-sec. wait to start delay)
<b>FUNCTION 4 – AUX 1 programming</b>	
OPTION 1	Horn confirmation upon the 2 <sup>nd</sup> press of the <b>LOCK</b> button
OPTION 2*	Priority door access
OPTION 3	Horn confirmation upon the 1 <sup>st</sup> press of the <b>LOCK</b> button.
<b>FUNCTION 5 – Pager (Pager sold separately)</b>	
OPTION 1	Pager ENABLED
OPTION 2*	Pager DISABLED

<b>MODE 3</b> (* indicates default setting)	
<b>FUNCTION 1 – Ready Mode Option</b>	
OPTION 1	Enabled by handbrake
OPTION 2*	Enabled by remote
<b>FUNCTION 2 – Bypass</b>	
OPTION 1	ADS
OPTION 2*	Xpresskit
OPTION 3	Fortin
<b>FUNCTION 3 – Bypass Type</b>	
OPTION 1	One Way communication
OPTION 2*	Two Way communication (For Xpresskit bypass only)

## Bypass

Remote starters of this series have the ability to work in two way mode (D2D) with **Xpresskit** bypass modules. They also offer one way communication with **Xpresskit**, **ADS** and **Fortin** brand bypass modules.

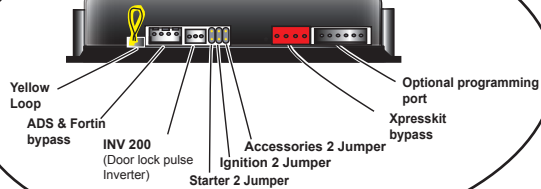
**Note:** For Hardware 5.0 and higher, there can only be one bypass connected to the unit.

# WIRING SCHEMATIC

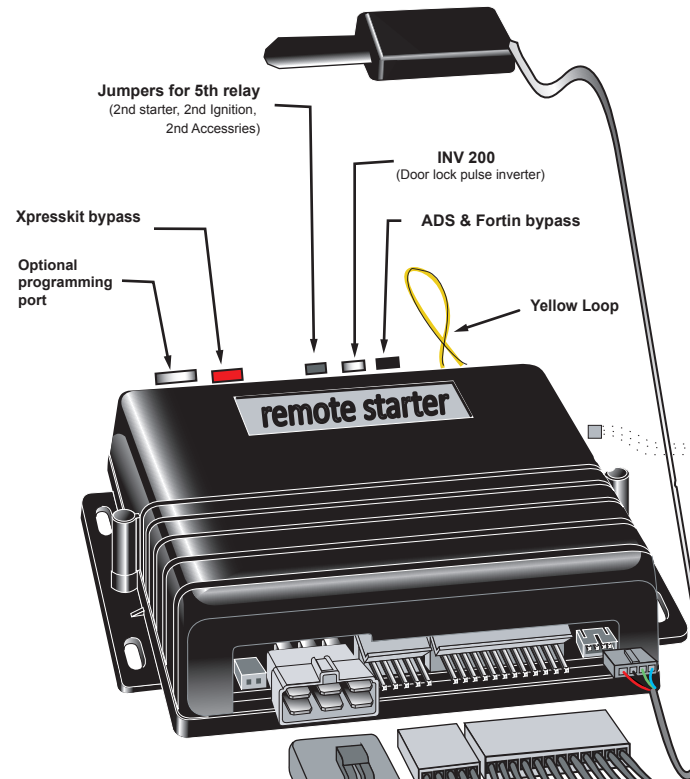
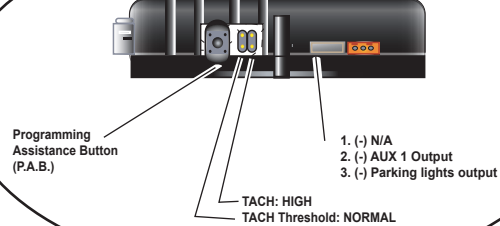
## For Automatic transmission:

Cut the yellow loop before plugging the module.

### REAR VIEW OF MODULE

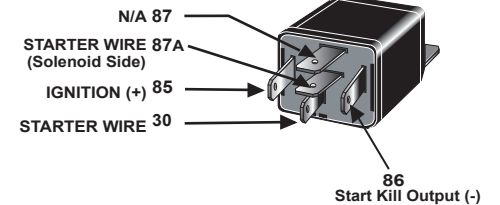


### SIDE VIEW OF MODULE



- 3. YELLOW ..... (-) Parking lights output
- 2. BLUE/WHITE ..... (-) AUX 1 output
- 1. GRAY/LIGHT BLUE ... (-) N/A

### Optional Starter Kill Relay



- YELLOW ..... IGNITION
- RED ..... 12V (Battery)
- ORANGE ..... ACCESSORIES (Heater Blower Motor)
- PURPLE ..... STARTER
- GREEN ..... 5th RELAY
- RED ..... +12V (Battery)

- 1- BLACK ..... GROUND (-)
- 2- PURPLE ..... TACH (AC)
- 3- GREY ..... HOOD SWITCH (-)
- 4- ORANGE ..... BRAKE SWITCH (+)
- 5- YELLOW ..... PARKIN LIGHTS (+)

- 12- YELLOW ..... (+) Glow plug input
- 11- GREY ..... (-) NEG. Door input
- 10- WHITE ..... (-) GROUND when running output
- 9- PURPLE ..... (-) EXT. TRIGGER input
- 8- ORANGE ..... (-) Parking Brakes input
- 7- WHITE/ORANGE ..... (-) Starter kill output
- 6- BLUE/WHITE ..... (+) POS. Door input
- 5- WHITE/GREEN ..... (-) DISARM output
- 4- WHITE/BROWN ..... (-) REARM output
- 3- GREEN ..... (-) UNLOCK output
- 2- BROWN ..... (-) LOCK output
- 1- BLUE ..... (-) TRUNK output